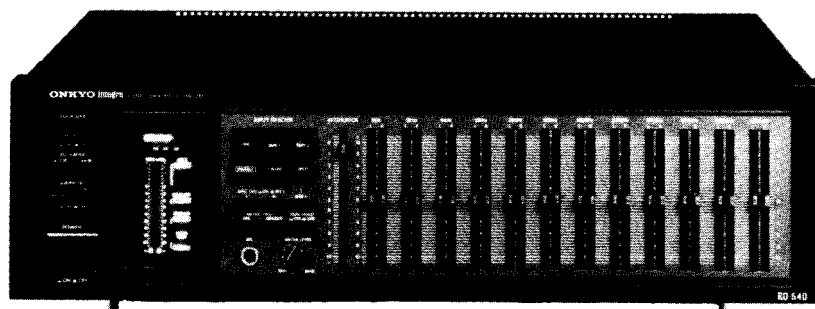


ONKYO SERVICE MANUAL

Stereo Graphic Equalizer

MODEL EQ-540



UD	120V AC, 60Hz
UW	120V/220V AC, 50Hz/60Hz
UQ	240V AC, 50Hz

ONKYO®
AUDIO COMPONENTS

SPECIFICATIONS

EQUALIZER SECTION

Input:	Sensitivity (FLAT): 150 mV
	Impedance: 50 kohms
Output:	Voltage (FLAT): 150 mV
	Impedance: 1 kohm
Max. output:	More than 5 V, 20 Hz – 20 kHz, 0,05% THD.
Frequency response:	+0 / -0.5 dB, 10 Hz – 35 kHz
Total harmonic distortion:	Less than 0.01%, 20 Hz – 20 kHz, 1.5 V output (FLAT)
Signal to noise ratio:	100 dB, 1.5 V output, IHF-A, input short
Adjustable range:	±6 dB / ±12 dB
Gain:	0 dB to -20 dB

OSCILLATOR SECTION

Step frequencies:	32 Hz, 64 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz
Frequency response:	±1 dB, 32 Hz – 16 kHz
Output voltage:	150 mV

MIC. AMP. SECTION

Input:	Sensitivity: 0.2 mV
	Impedance: 50 kohms
Frequency response:	+0 / -1 dB, 20 Hz – 30 kHz
Max. input:	100 mV

OTHERS

AC outlet:	200 watts (UNSWITCHED)
Power supply:	AC 120 V, 60 Hz
Dimensions:	435 (W) x 131 (H) x 362 (D) mm 17-1/8" x 5-3/16" x 14-1/4"
Weight:	5.7 kg, 12.6 lbs.

Specifications and features are subject to change without notice.

PRECAUTIONS

1. Replacing the lamps

This unit uses the lamps listed below.

CIRCUIT NO.	PART NO.	DESCRIPTION
PL101	210195	PL-AS-EQ540

2. Insulation resistance measurement

Connect the insulating-resistance tester between the plug of power supply cable and the screw on the bottom board.
Specifications; 500V, more than 10 MΩ

3. Voltage selector (Rear panel)

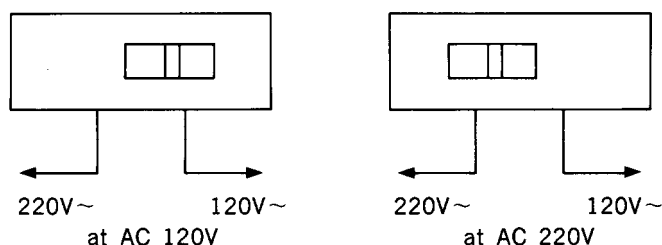
Worldwide models are equipped with a voltage selector to conform with local power supplies.

Be sure to set this switch to match the voltage of the power supply in your area before turning the power switch on.

Voltage is changed by sliding the groove in the switch with a screwdriver to the right or left.

Confirm that the switch has been moved all the way to the right or left before turning the power switch on.

Models without a voltage selector can only be used in areas where the power supply is the same as that of the unit.



4. Accessory microphone

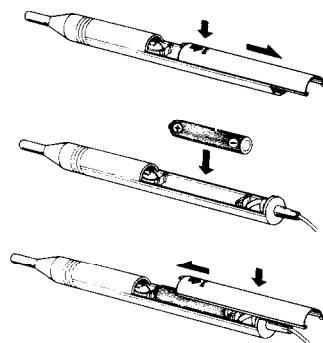
Battery

The microphone is powered by a battery. Before using this microphone for the first time, insert the battery (included) as shown in the diagram. Whenever the microphone is not in use, be sure to set its ON/OFF switch to OFF.

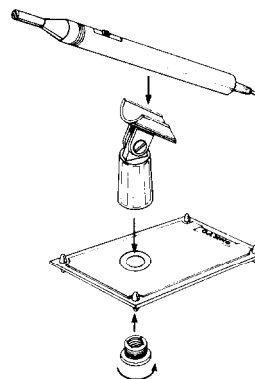
In case the microphone is left ON, the average life of its battery is about 500 hours. The battery lasts from two to three years during ordinary use, but its life may be shorter due to frequent use or environmental conditions (temperature or humidity). If no microphone output can be obtained or noise is produced, please replace the battery with a new one conforming to the table below.

Type	Voltage	Size
Manganes	1.5 Volt	AA R6 UM-3

Battery Replacement



Assembly of the stand



ADJUSTMENT PROCEDURES

1. Preparation

Switch position

POWER.....	ON
EQUALIZER.....	OFF
EQ. RANGE.....	$\pm 12\text{dB}$
SLIDER LED L, R.....	ON
INPUT SELECTOR.....	LINE
OSC. CH L, R.....	ON
METER INPUT.....	SOURCE
PEAK HOLD.....	OFF
METER LEVEL.....	MAXIMUM
ATTENUATOR.....	0 (MAXIMUM)
EQ. LEVEL.....	0 (CENTER)

2. Adjustment of level meter sensitivity

- Input a 1 KHz, 15 mV signal to LINE INPUT L.
- With the semi-fixed resistor VR401, align the indicator tube PEAK LEVEL meter to the "0" graduation. (Move up from below and stop at the position where the "0" section lights.)

3. Adjustment of the meter L, R deviation

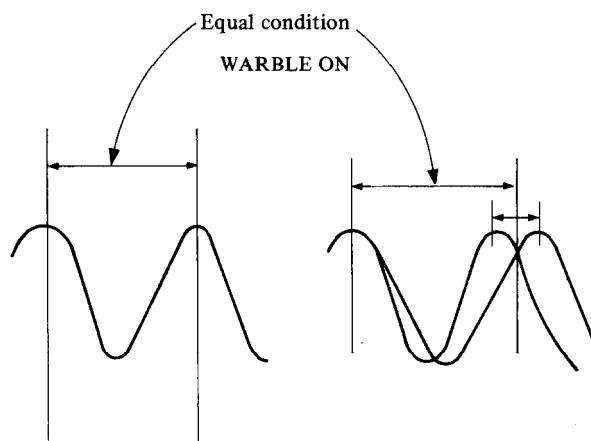
- Input a 1 KHz, 15 mV signal to both L, R of LINE INPUT.
- With the semi-fixed resistor VR115, adjust the PEAK LEVEL meter indication until they are the same. (Adjust until the METER LEVEL movement up/down for L, R deviation is minimum.)

4. Adjustment of distortion of oscillator signal

- Set the INPUT SELECTOR to SPOT.
- Push the SHIFT shift to 1 KHz.
- With the semi-fixed resistor VR302, adjust the oscillator output (above 150 mV) so that the distortion factor is minimum.

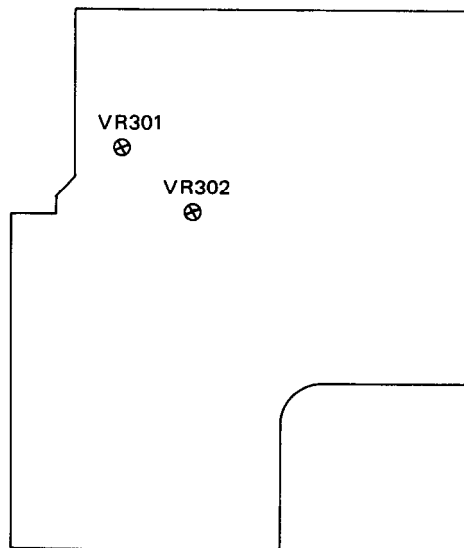
5. Adjustment of WARBLE TONE

- After the adjustment of Item 4, turn ON the WARBLE switch.
- Adjust the semi-fixed resistor VR301 so that the center of the 1 KHz waveform of the oscillator is the center of the abnormality.

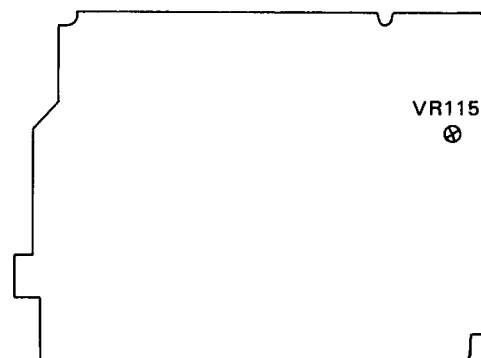


Adjustment point

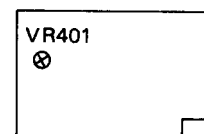
NAPS-3408-1



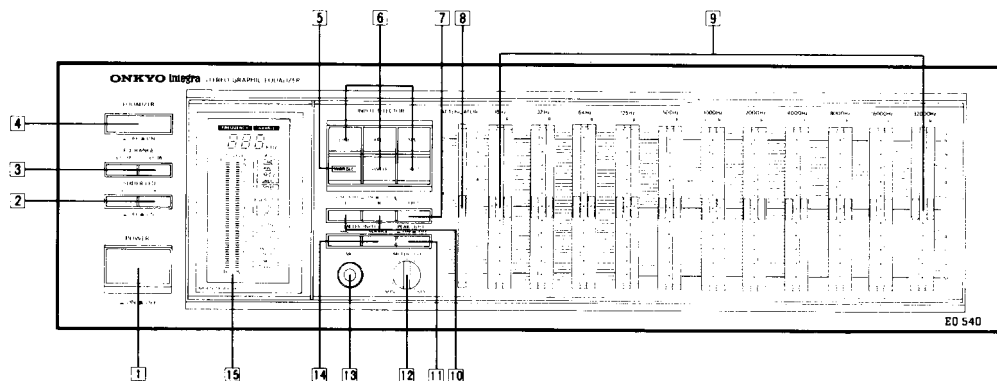
NAAF-3407-1



NADG-3411-1

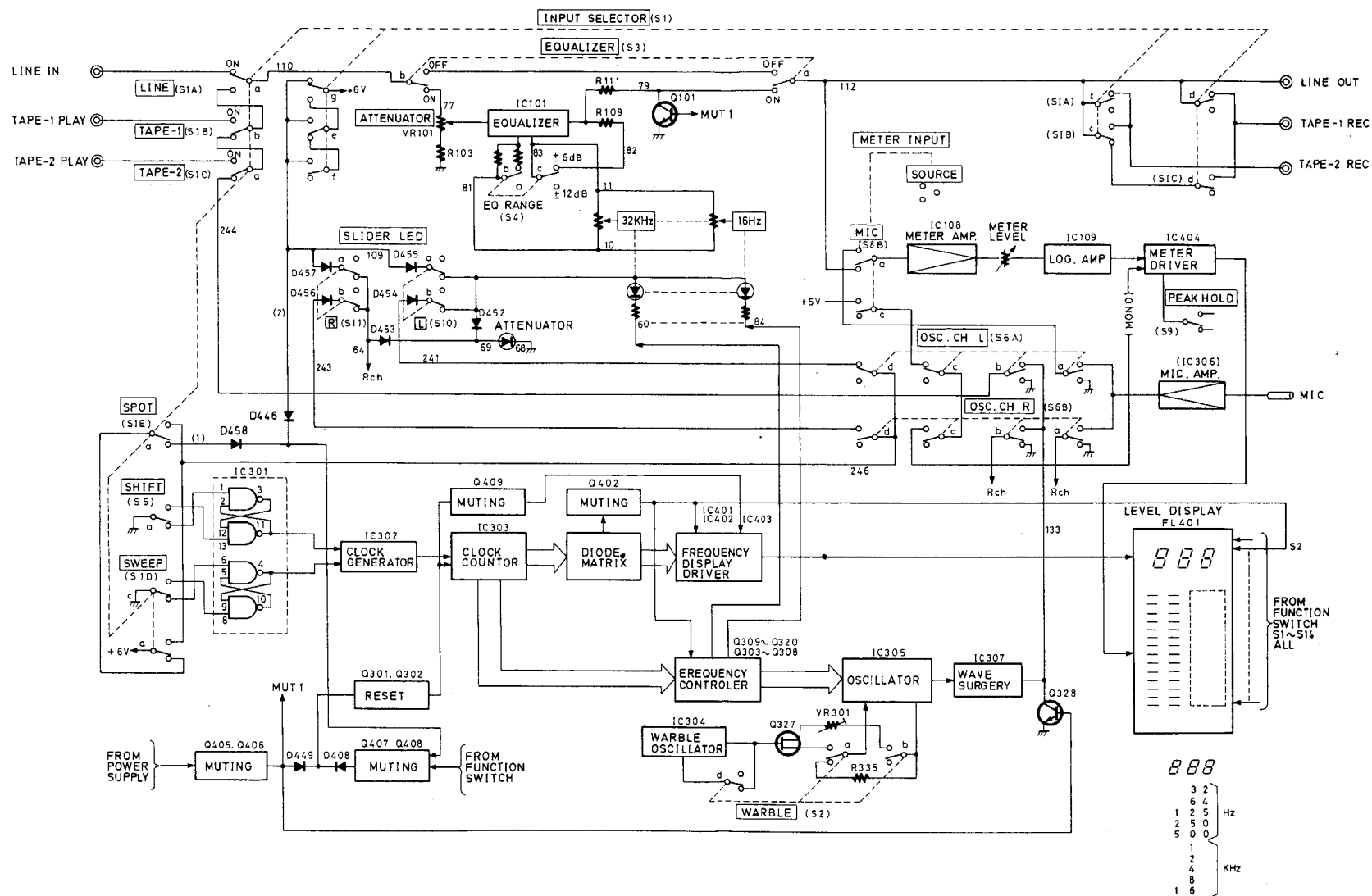


FRONT PANEL FACILITIES

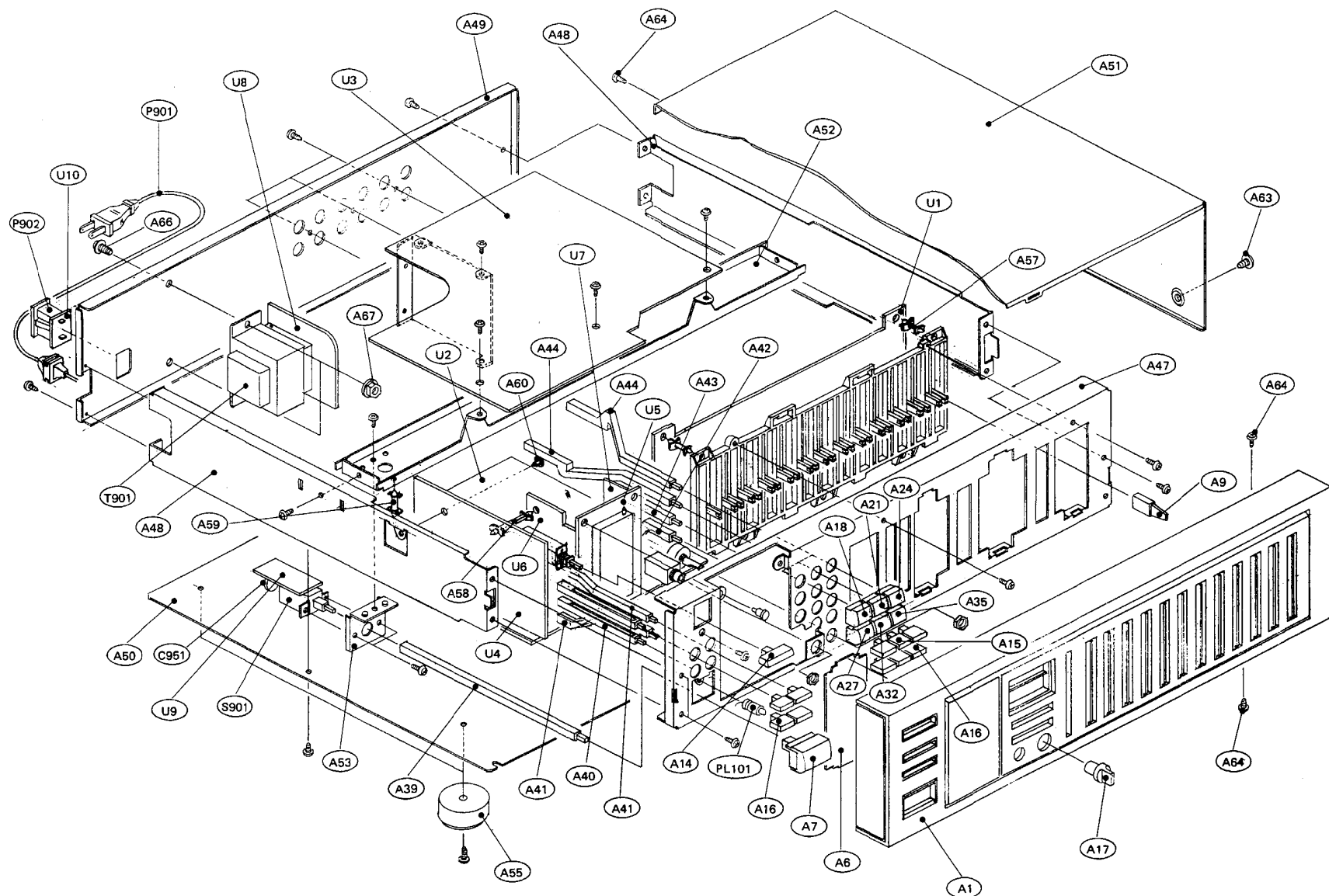


1. Power Switch and Indicator (POWER)
2. Level Controls and Attenuator Indicator Switches (SLIDER LED)
3. Equalizer Range Switch (EQ RANGE)
4. Equalizer Switch (EQUALIZER)
5. Warble Mods Switch (WARBLE)
6. Input Selector Switches (INPUT SELECTOR)
LINE, TAPE-1, TAPE-2, SWEEP, SPOT
7. Spot Frequency Shift Switch (SHIFT)
8. Attenuator and Indicator (ATTENUATOR)
9. Level Controls and Indicators
10. Oscillator Channel Switches (OSC CH)
11. Peak Hold Switch (PEAK HOLD)
12. Meter Level Control (METER LEVEL)
13. Microphone Jack (MIC)
14. Level Meter Input Selectors (METER INPUT)
SOURCE, MIC
15. Fluorescent Display (FREQUENCY, PEAK LEVEL, etc.)

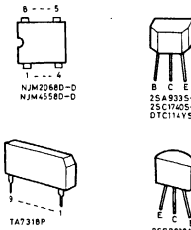
BLOCK DIAGRAM



CHASSIS-EXPLODED VIEW

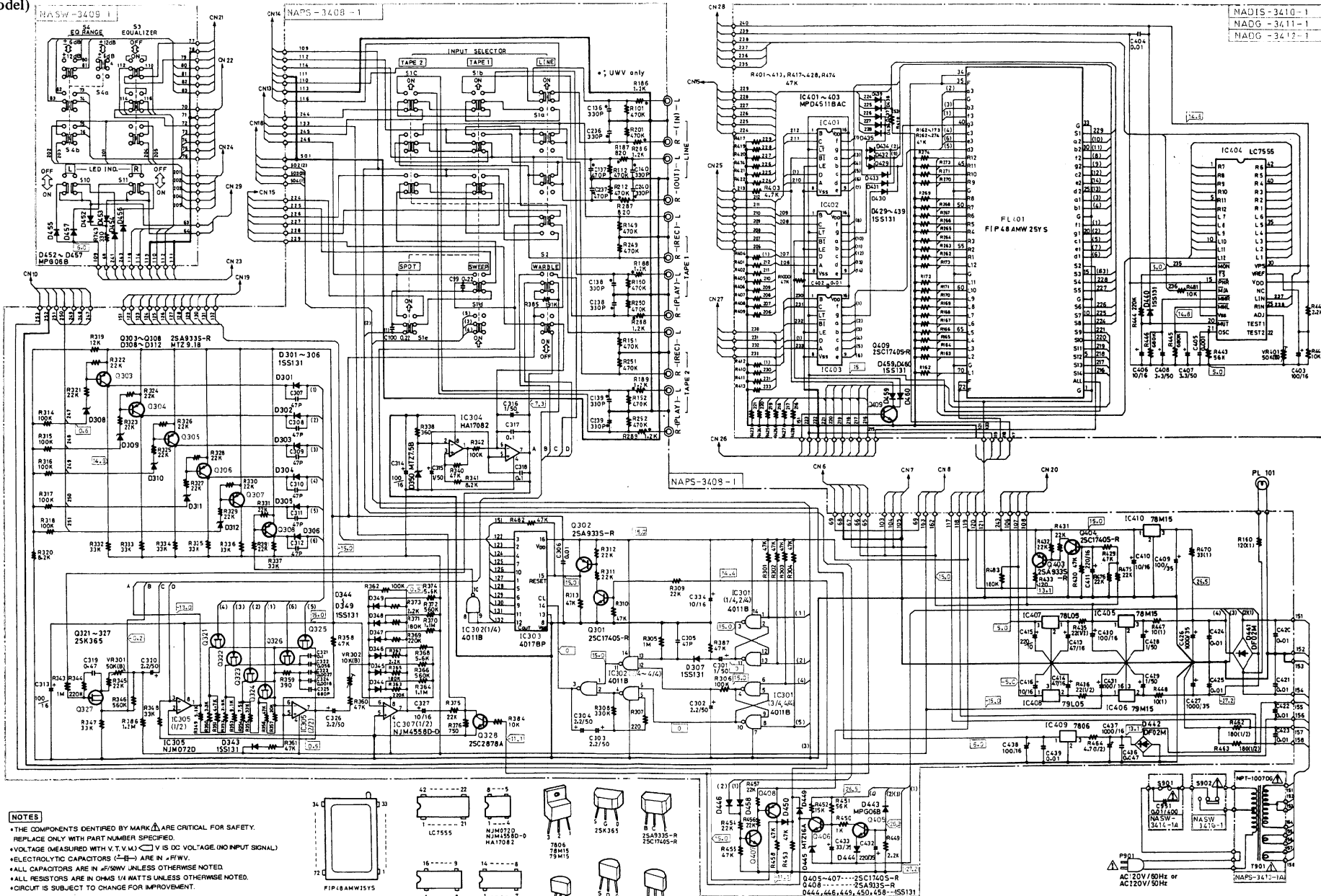


(120V, 240V, 120V/220V Model)



(120V/220V Model)

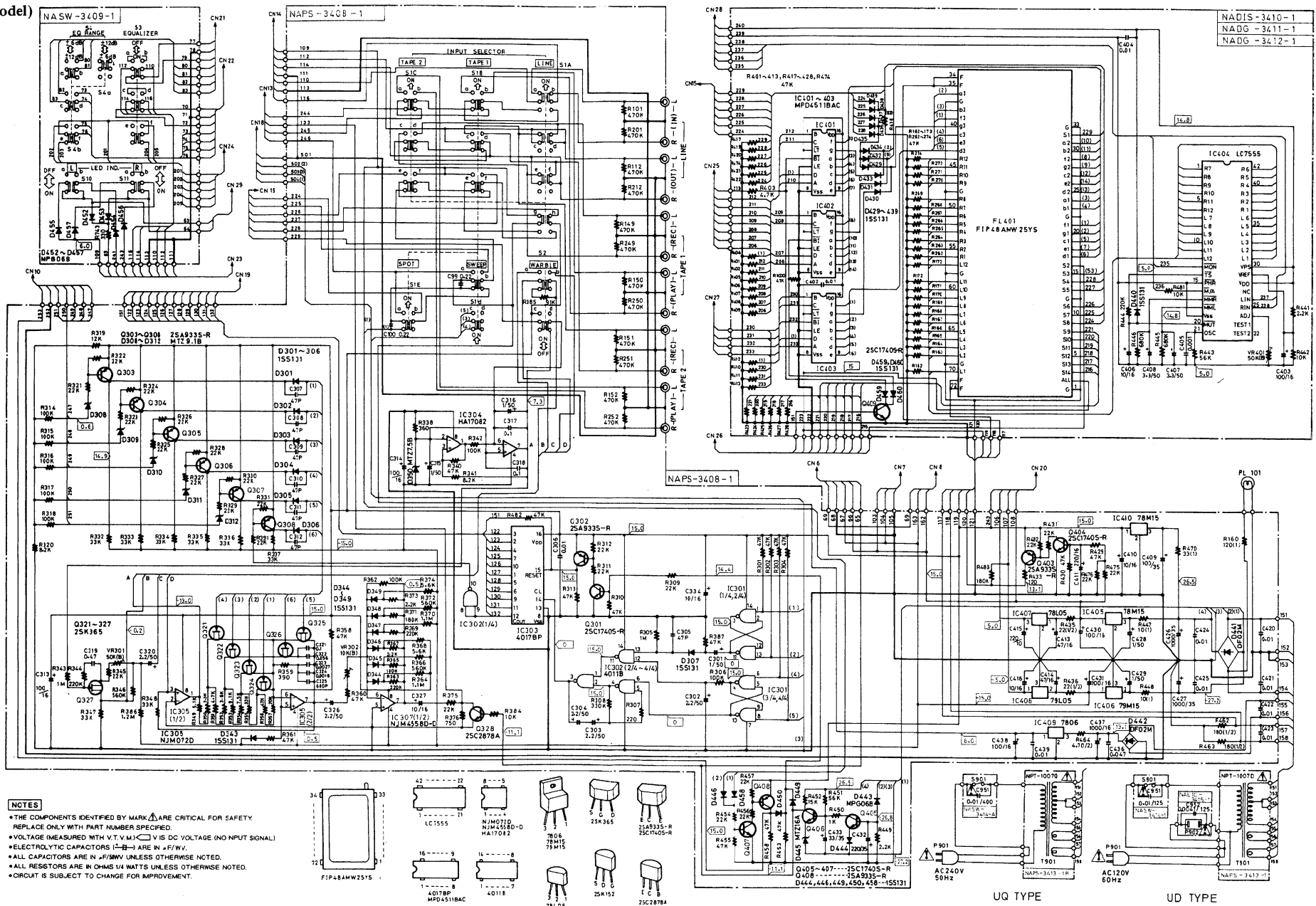
NADIS - 3410-1
NADG - 3411-1
NADG - 3412-1



ONKYO CORPORATION

SCHEMATIC DIAGRAM 1/2

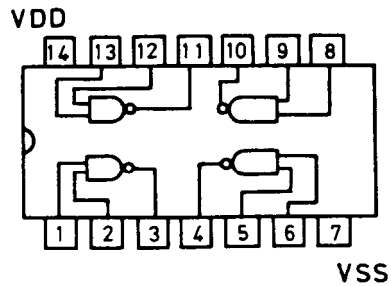
(120V, 240V Model)



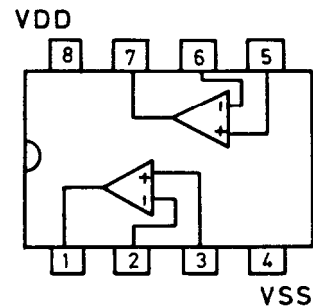
ONKYO CORPORATION

IC BLOCK DIAGRAM

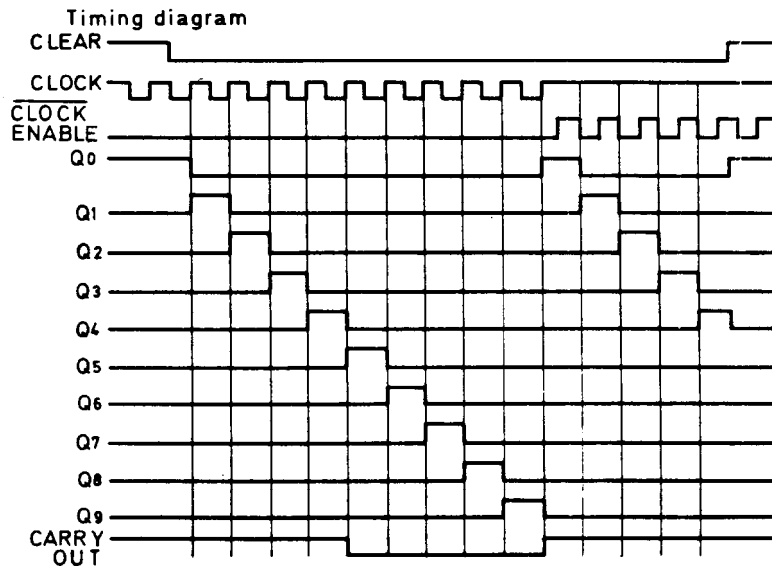
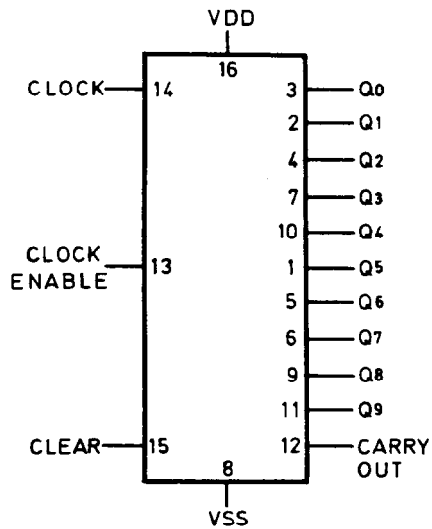
4011 (2-Input NAND Gate)



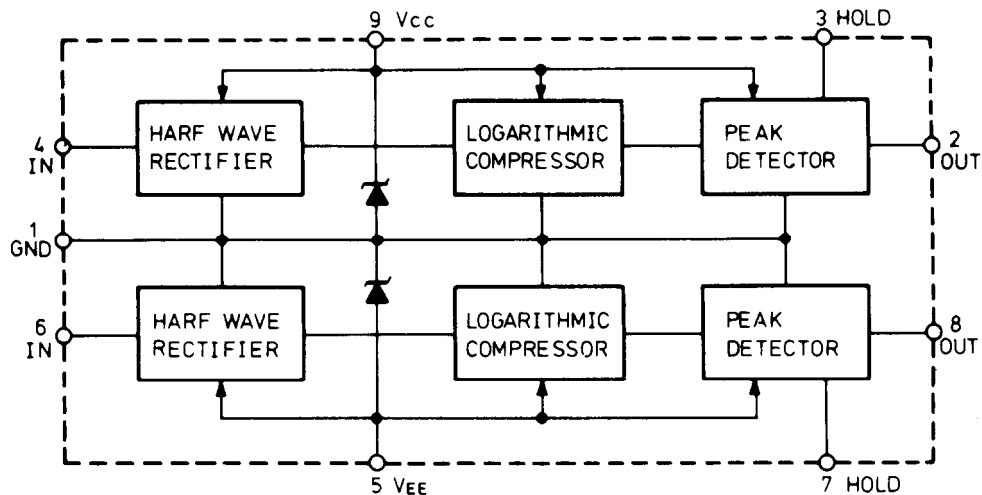
NJM2068DD (Operational Amplifier)
 NJM4558DD
 NJM072D
 HA17082



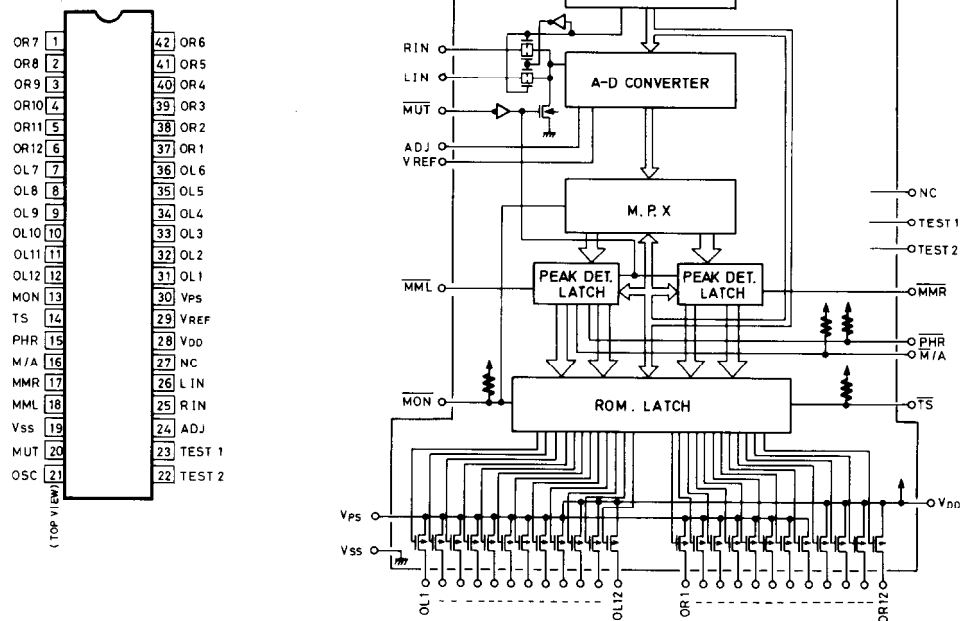
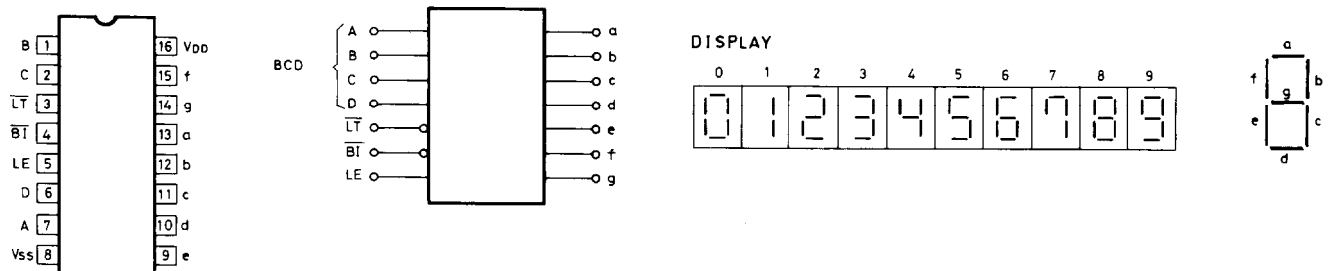
4017
 (Decade Counter with
 10 Decoded Output)



TA7318P (Meter Driver)



LC7555 (Peak Holding Level Meter)

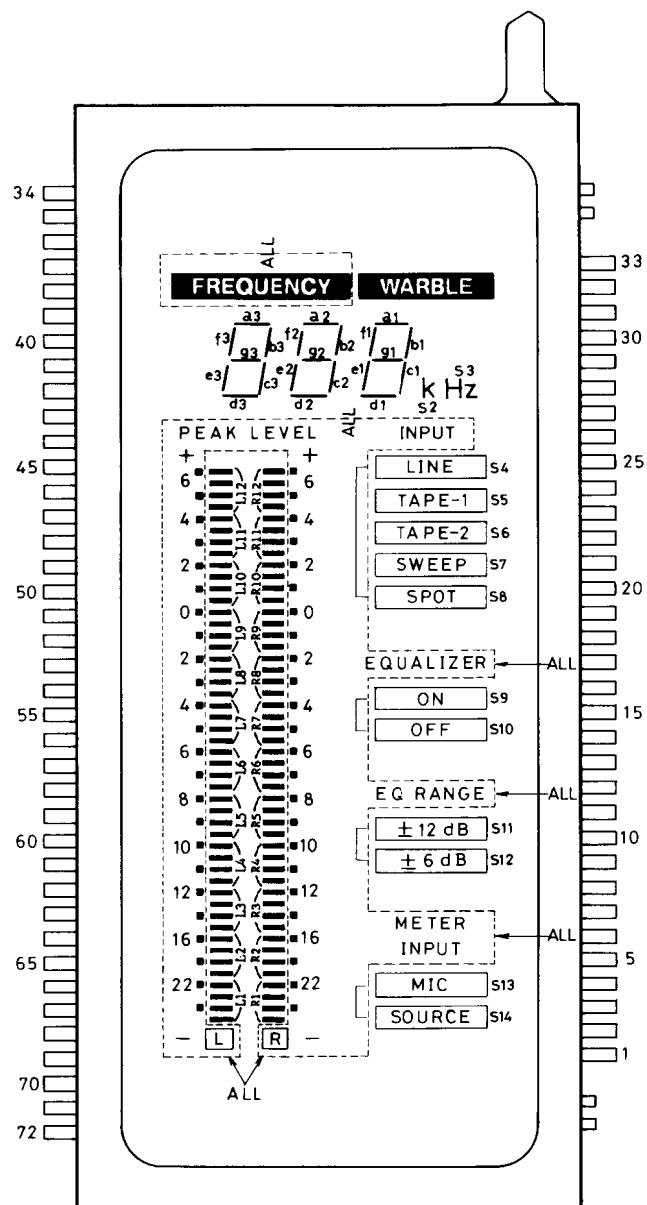
 μ PD4511BAC (BCD-to Seven Segment Driver)

TRUTH TABLE

INPUT							OUTPUT							DISPLAY
LE	BT	LT	D	C	B	A	a	b	c	d	e	f	g	
X	X	L	X	X	X	X	H	H	H	H	H	H	H	8
X	L	H	X	X	X	X	L	L	L	L	L	L	L	BLANK
L	H	H	L	L	L	L	H	H	H	H	H	H	L	0
L	H	H	L	L	L	H	L	H	H	L	L	L	L	1
L	H	H	L	L	H	L	H	H	L	H	H	L	H	2
L	H	H	L	L	H	H	H	H	H	H	L	L	H	3
L	H	H	L	H	L	L	L	H	H	L	L	H	H	4
L	H	H	L	H	L	H	H	L	H	H	L	H	H	5
L	H	H	L	H	H	L	H	L	H	H	H	H	H	6
L	H	H	L	H	H	H	H	H	H	L	L	H	L	7
L	H	H	H	L	L	L	H	H	H	H	H	H	H	8
L	H	H	H	L	L	H	H	H	H	H	L	H	H	9
L	H	H	H	L	H	L	L	L	L	L	L	L	L	BLANK
L	H	H	H	L	H	H	L	L	L	L	L	L	L	BLANK
L	H	H	H	H	L	L	L	L	L	L	L	L	L	BLANK
L	H	H	H	H	H	L	L	L	L	L	L	L	L	BLANK
L	H	H	H	H	H	H	L	L	L	L	L	L	L	BLANK
H	H	H	X	X	X	X								

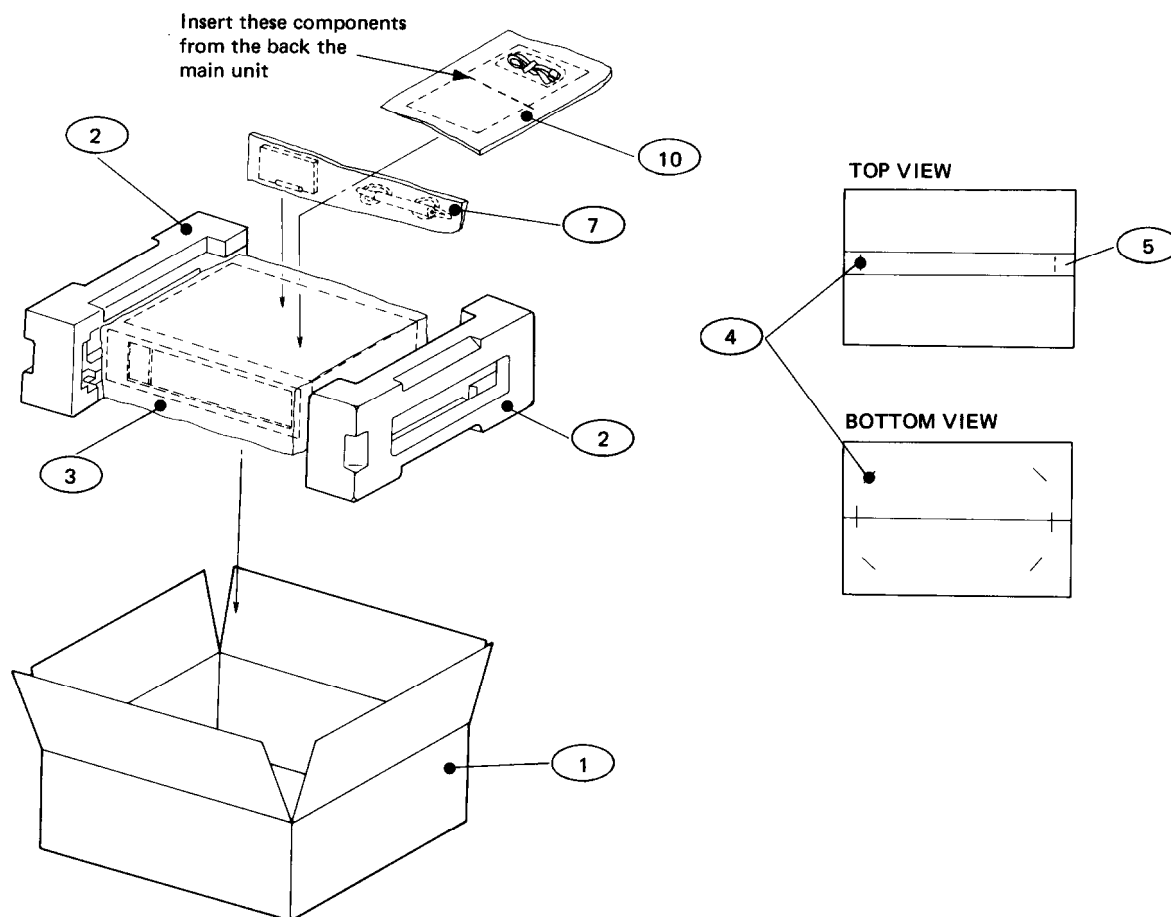
H: HIGH LEVEL L: LOW LEVEL X: H or L

FIP48AMW25YS (Fluorescent Tube)



TERMINAL NO.	1	2	3	4	5	6	7	8	9	10
ELECTROOE	G	P ALL	P S14	P S13	P S12	P S11	P S10	P S9	P S8	P S7
TERMINAL NO.	11	12	13	14	15	16	17	18	19	20
ELECTROOE	P S6	G	P S5	P S4	P S3	P S2	P d1	P e1	P c1	P s1
TERMINAL NO.	21	22	23	24	25	26	27	28	29	30
ELECTROOE	P f1	G	P b1	P a1	P d2	P e2	P c2	P s2	P f2	P b2
TERMINAL NO.	31	32	33	34	35	36	37	38	39	40
ELECTROOE	P a2	P S1	G	F	F	P a3	G	P b3	P f3	P s3
TERMINAL NO.	41	42	43	44	45	46	47	48	49	50
ELECTROOE	P c3	P e3	P d3	P R12	P R11	P R10	P R9	G	P R8	P R7
TERMINAL NO.	51	52	53	54	55	56	57	58	59	60
ELECTROOE	P R6	P R5	P R4	P R3	P R2	P R1	P L12	G	P L11	P L10
TERMINAL NO.	61	62	63	64	65	66	67	68	69	70
ELECTROOE	P L9	P L8	P L7	P L6	P L5	P L4	P L3	P L2	G	P L1
TERMINAL NO.	71	72								
ELECTROOE	F	F								

PACKING PROCEDURES

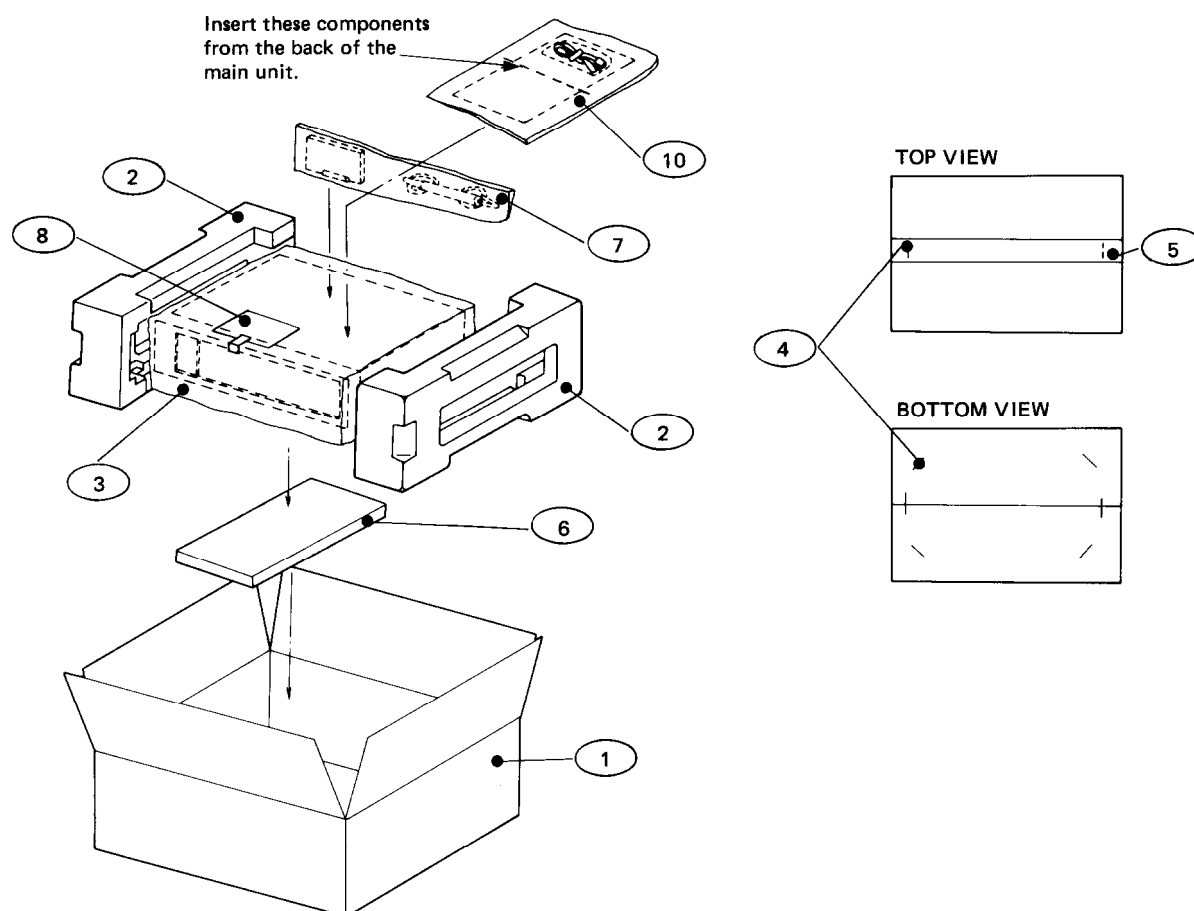


REF. NO.	PART NO.	DESCRIPTION
1	29051731	MASTER CARTON BOX
2	29091283	PAD
3	29100104	POLY-VINYL BAG
4	282301	SEALING HOOK
5	260012	W=50 mm, DAMPLON TAPE
10	ACCESSORY BAG ASS'Y	
	29341287	INSTRUCTION MANUAL [D]
	29341288	INSTRUCTION MANUAL [W][V][Q]
	29341297	INSTRUCTION MANUAL, I [W][V]
	29358002F	SERVICE STATION LIST [N]
	29365019	WARRANTY CARD [N]
	29365020	WARRANTY CARD [V]
	29365022	WARRANTY CARD [Q]
	29100006A	350 x 250, POLY-VINYL BAG
	2010112	CONNECTION CABLE
	25055040	CV-K-2, CONVERSION PLUG [W]
7	24190008	MICROPHONE ASS'Y

NOTE

- [D]: ONLY 120V MODEL
 [V]: ONLY 220V MODEL
 [W]: ONLY 120V/220V MODEL
 [Q]: ONLY 240V MODEL

Only military market model

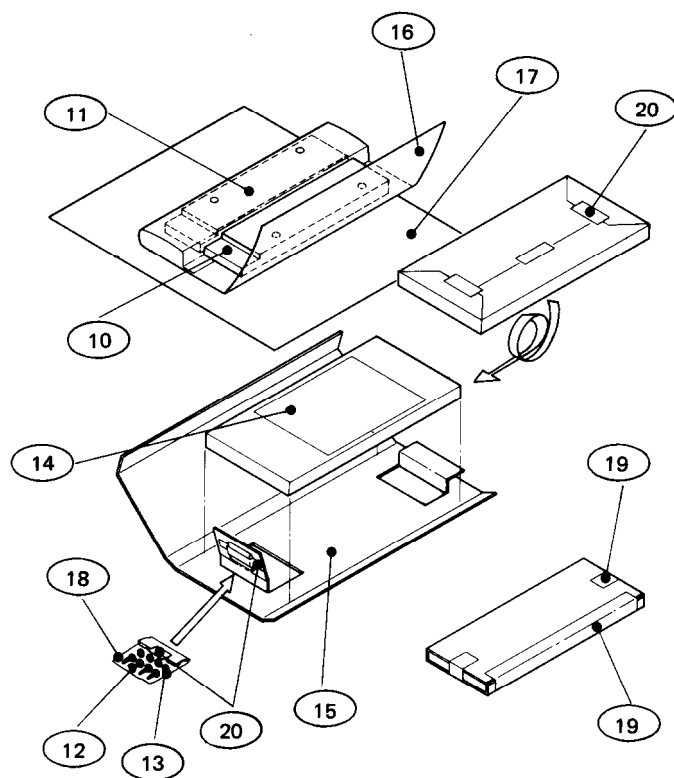


REF. NO.	PART NO.	DESCRIPTION
1	29051767	MASTER CARTON BOX
2	29091283	PAD
3	29100104	POLY-VINYL BAG
4	282301	SEALING HOOK
5	260012	W=50 mm, DAMPLON TAPE
6	—	SIDE BOARD
(6)	28185344	SIDE BOARD (L)
(6)	28185345	SIDE BOARD (R)
(6)	836440303	4STV+30CQBC, SCREW
(6)	870086	4 × 12BSBC, SPECIAL WASHER
(6)	29341018-1	INSTRUCTION MANUAL
(6)	29051732	CARTONBOX
(6)	29095539	PROTECTION SHEET
(6)	29095039-1	PROTECTION SHEET
(6)	29100026	POLY-VINYL BAG
	29360815	LABEL (120), AC CABLE [XD]
	29360816	LABEL (220), AC CABLE [XG]
10	ACCESSARY BAG ASS'Y	
	29341288	INSTRUCTION MANUAL
	29358002F	SERVICE STATION LIST
	29365021	WARRANTY CARD
	29100006A	350 x 250, POLY-VINYL BAG
	2010112	CONNECTION CABLE
	25055251	CV-CP, CONVERSION PLUG
7	24190008	MICROPHONE ASS'Y

REF. NO.	PART NO.	DESCRIPTION
8	29380084	CAUTION (120) [XD]
8	29380085	CAUTION (220) [XG]

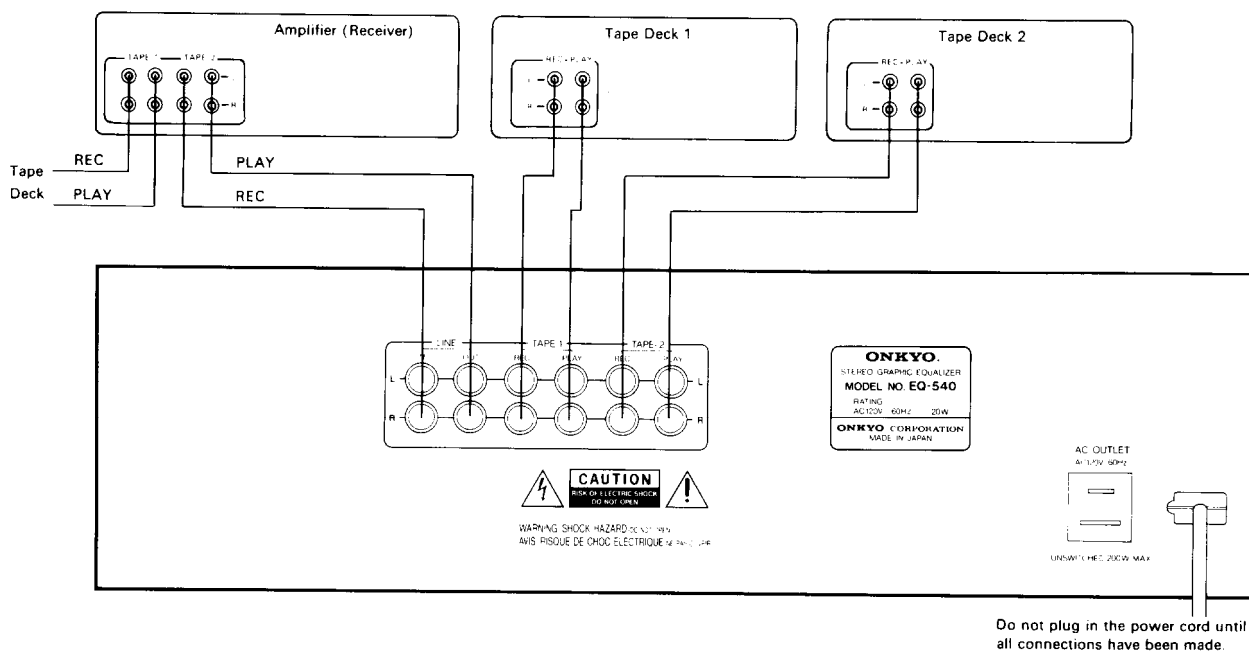
NOTE
 [XD]: ONLY 120V MODEL
 [XG]: ONLY 220V MODEL

Only military market model



REF. NO.	PART NO.	DESCRIPTION
10	28185344	Side board ass'y, left
11	28185345	Side board ass'y, right
12	836440303	4STV+30CQBC, Screw
13	870086	4 × 12BSBC, Special washer
14	29341018-1	Instruction manual
15	29051732	Carton box
16	29095539	580 × 400mm, Protection sheet
17	29095039-1	600 × 500mm, Protection sheet
18	29100026	Poly-vinyl bag
19	260012	Dampen tape
20	262005	Cellophane tape

SYSTEM CONNECTIONS



PRINTED CIRCUIT BOARD PARTS LIST

EQUALIZER CIRCUIT PC BOARD (NAAF-3406-1,NAAF-3406-1A) PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
IC101,IC107	222956	NJM2068DD
IC201,IC207		
IC102 ~ IC106	222811	NJM4558DD
IC202 ~ IC206		
	Transistors	
Q101,Q201	2212285	2SC2878A
	Diodes	
D447,D448	223172	1SS131
	Capacitors	
C101,C112	354780109	1 μ F, 50V, Elect.
C201,C212		
C102,C202	370134714	470 pF, 100V, Film (APS)
C103,C203	354780479	4.7 μ F, 50V, Elect.
C104,C105	354742209	22 μ F, 16V, Elect.
C204,C205		
C106,C206	354780689	6.8 μ F, 50V, Elect.
C107,C207	371122245	0.22 μ F, 50V, Mylar
C108,C208	354780479	4.7 μ F, 50V, Elect.
C109,C209	371121245	0.12 μ F, 50V, Mylar
C110,C210	354780229	2.2 μ F, 50V, Elect.
C111,C211	371126835	0.68 μ F, 50V, Mylar
C113,C213	354782299	0.22 μ F, 50V, Elect.
C114,C214	371123335	0.033 μ F, 50V, Mylar
C115,C215	354784799	0.47 μ F, 50V, Elect.
C116,C216	371128235	0.082 μ F, 50V, Mylar
C117,C217	371121835	0.018 μ F, 50V, Mylar
C118,C218	371122745	0.27 μ F, 50V, Mylar
C119,C219	371121235	0.012 μ F, 50V, Mylar
C120,C220	354781599	0.15 μ F, 50V, Elect.
C121,C221	371126825	6800 pF, 50V, Mylar
C122,C222	371126835	0.068 μ F, 50V, Mylar
C123,C223	371124725	4700 pF, 50V, Mylar
C124,C224	371123935	0.039 μ F, 50V, Mylar
C125,C127	371122225	2200 pF, 50V, Mylar
C225,C227		
C126,C226	371121835	0.018 μ F, 50V, Mylar
C128,C228	371121035	0.01 μ F, 50V, Mylar
C129,C229	371121025	1000 pF, 50V, Mylar
C130,C230	371124725	4700 pF, 50V, Mylar
C131,C231	370136814	680 pF, 100V, Film (APS)
C901~C904	354742209	22 μ F, 16V, Elect.

Jumper socket

25050140	NJPJ-3P-S
25050142	NJPJ-5P-S
25050144	NJPJ-7P-S
25050149	NJPJ-12P-S

EQUALIZER SWITCH AND MIC CIRCUIT PC BOARD (NAAF-3407-1) PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
IC108	222811	NJM4558DD
IC109	222509	TA7318P
IC306	222956	NJM2068DD

CIRCUIT NO.	PART NO.	DESCRIPTION
	Transistors	
Q309~Q320	221281	DTC114YS
Q401	2213354	2SA933SR
Q402	2213284	2SC1740SR
	Diodes	
D101,D201	224450621	MTZ6.2A, Zener
D102,D202	223172	1SS131
D313~D342		
D401~D428		
	Capacitors	
C132,C232	354780479	4.7 μ F, 50V, Elect.
C133,C134	354741009	10 μ F, 16V, Elect.
C233,C234		
C328,C417		
C419		
C331	354754709	4.7 μ F, 25V, Elect.
C336,C337	354741019	100 μ F, 16V, Elect.
C440		
	Resistors	
VR114,VR214	5104244	N16RGL10KB202
VR115	5210155	N06HR2KBD, Semi-fixed variable
	Switches	
S5,S6	25035593	NPS-162-142-222-L555
S8,S9	25035594	NPS-142-222-L556
	MIC Jack	
	25045241	MIC-JACK-EQ540
	Plugs	
	25055418	NPLG-5P400
	25055419	NPLG-6P401
	25055420	NPLG-10P402

MAIN PC BOARD (NAPS-3408-1,NAPS-3408-1A) PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
IC301,IC302	222840111	4011B
IC303	222840171	4017BP
IC304	22240195	HA17082
IC305	222735	NJM072D
IC307	222811	NJM4558DD
IC405,IC410	222780151	78M15
IC406	222790151	79M15
IC407	222780053	78L05
IC408	222790053	79L05
IC409	222780060	7806

Transistors

Q301	2213284	2SC1740SR
Q404~Q407		
Q302~Q308	2213354	2SA933SR
Q403,Q408		
Q321~Q327	2212445	2SK365GR
Q328	2212285	2SC2878A

CIRCUIT NO.	PART NO.	DESCRIPTION
Diodes		
D301~D307 D343~D349 D444,D446 D449,D450 D458 D308~D312 D350 D441,D442 D443 D445	223172 224450912 224450752 223892 22380025 224451601	1SS131 MTZ9.1B, Zener MTZ7.5B, Zener DF02M MPG06B MTZ16A, Zener
Capacitors		
C136,C138 C139,C140 C236,C238 C239,C240 C137,C237 C301,C315 C316 C302~C304 C326,C320 C313,C314 C317,C318 C321 C319 C322 C323 C324 C325 C327,C334 C410,C416 C409 C411 C413,C414 C415 C426,C427 C428,C429 C430,C431 C432 C433 C437 C438	370133314 370134714 354780109 354780229 354741019 371121045 371124745 371125635 371122725 371121825 370136814 354741009 354761019 354742219 354744709 354732219 354761029 354780109 354741019 354762219 354763309 354741029 354741019	330 pF, 100V, Film (APS) [V] 470 pF, 100V, Film (APS) [V] 1 μ F, 50V, Elect. 2.2 μ F, 50V, Elect. 100 μ F, 16V, Elect. 0.1 μ F, 50V, Mylar 0.47 μ F, 50V, Mylar 0.056 μ F, 50V, Mylar 2700 pF, 50V, Mylar 1800 pF, 50V, Mylar 680 pF, 100V, Film (APS) 10 μ F, 16V, Elect. 100 μ F, 35V, Elect. 220 μ F, 16V, Elect. 47 μ F, 16V, Elect. 220 μ F, 10V, Elect. 1000 μ F, 35V, Elect. 1 μ F, 50V, Elect. 100 μ F, 16V, Elect. 220 μ F, 35V, Elect. 33 μ F, 35V, Elect. 1000 μ F, 16V, Elect. 100 μ F, 16V, Elect.
Resistors		
VR301 VR302 R160 R435,R436 R447,R448 R462,R463 R464 R470	5210153 5210154 441621214 442522204 441621004 442521814 441524704 441623304	N06HR50KBD, Semi-fixed N06HR10KBD, Semi-fixed 120 Ω , 1W, Metal oxide film 22 Ω , 1/2W, Metal oxide film 10 Ω , 1W, Metal oxide film 180 Ω , 1/2W, Metal oxide film 47 Ω , 1/2W, Metal oxide film 33 Ω , 1W, Metal oxide film
Switch		
S1	25035595	NPS-182-ETC-L557
Input terminal		
	25045242	NPJ-4PDBL-115
Jumper sockets		
	25050140 25050141 25050142 25050143 25050144 25050149	NJPJ-3P-S NJPJ-4P-S NJPJ-5P-S NJPJ-6P-S NJPJ-7P-S NJPJ-12P-S

CIRCUIT NO.	PART NO.	DESCRIPTION
	Radiator 27160232	RAD-79

EQUALIZER SWITCH PC BOARD (NASW-3409-1) PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
Diodes		
D452~D457	22380025	MPG06B
Switches		
S3	25035597	NPS-162-L559
S4	25035596	NPS-162-322-L558
Sockets		
	25050374	NSCT-5P201
	25050376	NSCT-10P203

FL TUBE PC BOARD (NADIS-3410-1) PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
FL Tube		
FL101	212060	FIP48AMW25YS
IC		
IC403	22240186	MPD4511BAC
Diodes		
D429,D430 D432~D439	223172	1SS131

FL DRIVER CIRCUIT PC BOARD (NADG-3411-1) PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
IC		
IC404	22240187	LC7555
Diode		
D440	223172	1SS131
Capacitors		
C403	354741019	100 μ F, 16V, Elect.
C406	354741009	10 μ F, 16V, Elect.
C407,C408	354780339	3.3 μ F, 50V, Elect.
Resistors		
VR401	5210152	N06HR50KBE, Semi-fixed
RA402,RA403	49123473408	RM1/8GJ 47K \times 8, Resistor network
Socket		
	25050375	NSCT-6P202

FL DRIVER CIRCUIT PC BOARD (NADG-3412-1) PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
ICs		
IC401,IC402	22240186	MPD4511BAC
Transistor		
Q409	2213284	2SC1740SR
Diodes		
D431,D459	223172	1SS131

CIRCUIT NO.	PART NO.	DESCRIPTION
Resistors		
RA401,RA404	49123473408	RM1/8GJ 47K × 8, Resistor network
Socket		
	25050376	NSCT-10P203

POWER TRANSFORMER PC BOARD (NAPS-3413-1,NAPS-3413-1A,NAPS-3413-1B) PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
Transformer		
T901	2300354	NPT-1007D [D]
	2300356	NPT-1007DG [V][W][X]
	2300357	NPT-1007Q [Q]
Capacitor		
C952	3500077	DE7150F472M
Cover(capacitor)		
	27300601	SB-1925 [V][W][X][Q]
Jumper socket		
	25050145	NJPJ-8P-S
Plug		
	25055421	NPLG-2P403

POWER SWITCH PC BOARD (NASW-3414-1,NASW-3414-1A) PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
Capacitor		
C951	3500065A	DE7150FZ103P
Cover(capacitor)		
	27300601	SB-1925 [V][W][X][Q]
Switch		
S901	25035598	NPS-111-L560P

AC SOCKET PC BOARD (NAETC-3415-1) PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
Socket		
P902	25050316	NSCT-2P143T, AC Outlet

VOLTAGE SELECTOR (NAETC-3416-1) PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION
Switch		
S902	25065228	NSS-2299, Slide

NOTE

- [X]: Only Military market model
- [V]: Only West germany model
- [D]: Only 120V Model
- [W]: Only 120V/220V Model
- [Q]: Only 240V Model

CHASSIS EXPLODED VIEW PART LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
A1	27211005	FRONT PANEL ASS'Y	△P902	25050316	NSCT-2P143T, AC SOCKET
(A2)	27215143	GUIDE PANEL	PL101	210195	PL-AS-EQ540, LAMP
(A3)	28125194-1	END CAP, LEFT			NSS-2299, SLIDE SWITCH
(A4)	28125195-1	END CAP, RIGHT	U1	1W025506-1	NAAF-3406-1, EQUALIZER CIR- CUIT PC BOARD ASS'Y
(A5)	28191481	FRONT FILTER		1W025506-1A	NAAF-3406-1A, EQUALIZER CIRCUIT PC BOARD ASS'Y
(A6)	28133206	COLOR FILTER			[V]
(A8)	28198714	FACET	U2	1W025507-1	NAAF-3407-1, EQUALIZER SWITCH AND MIC CIRCUIT PC BOARD ASS'Y
A7	28323175	KNOB (POW)	U3	1W025508-1	NAPS-3408-1, MAIN PC BOARD ASS'Y
A9	28323451	KNOB ASS'Y (GE)		1W025508-1A	NAPS-3408-1A, MAIN PC BOARD ASS'Y [V]
A14	28323453	KNOB (EQ)	U4	1W025509-1	NASW-3409-1, EQUALIZER SWITCH PC BOARD ASS'Y
A15	28323454	KNOB, (MODE-C)			
A16	28323455	KNOB, (MODE-H)	U5	1W025510-1	NADIS-3410-1, FL TUBE PC BOARD ASS'Y
A17	28323456	KNOB (LEV)	U6	1W025511-1	NADG-3411-1, FL DRIVER CIR- CUIT PC BOARD ASS'Y
A18	28323457	KNOB ASS'Y (LINE)	U7	1W025512-1	NADG-3412-1, FL DRIVER CIR- CUIT PC BOARD ASS'Y
A21	28323460	KNOB ASS'Y (TAPE-1)	U8	1W025513-1	NAPS-3413-1, POWER TRANS- FORMER PC BOARD ASS'Y
A24	28323462	KNOB ASS'Y (TAPE-2)		1W025513-1A	NAPS-3413-1A, POWER TRANS- FORMER PC BOARD ASS'Y
A27	28323464	KNOB ASS'Y (WARBLE)			[V][W][X]
A32	28323466	KNOB ASS'Y (SWEEP)		1W025513-1B	NAPS-3413-1B, POWER TRANS- FORMER PC BOARD ASS'Y
A35	28323468	KNOB ASS'Y (SPOT)			[A][B]
A39	27273102	JOINT (A)	U9	1W025514-1	NASW-3414-1, POWER SWITCH PC BOARD ASS'Y
A40	27273103	JOINT (B)		1W025514-1A	NASW-3414-1A, POWER SWITCH PC BOARD ASS'Y
A41	27273104	JOINT (C)			[V][W][X][A][B]
A42	27273105	JOINT (D)	U10	1W025515-1	NAETC-3415-1, AC SOCKET PC BOARD ASS'Y [D][V][W][X]
A43	27273106	JOINT (E)	U11	1W025516-1	NASW-3416-1, VOLTAGE SELECTOR SWITCH PC BOARD ASS'Y [W]
A44	27273107	JOINT (F)			
A47	27110442	FRONT BRACKET			
A48	27115238	SIDE BRACKET			
A49	27121156	REAR PANEL [D]			
	27121157	REAR PANEL [W][X]			
	27121158	REAR PANEL [V]			
	27121159	REAR PANEL [A][B]			
A50	27170252	BOTTOM PLATE			
A51	28184397Z	TOP COVER			
A52	27130553	CENTER BRACKET			
A53	27190660	SWITCH HOLDER			
A55	27175153	BOTTOM LEG			
A57	27190688	PC HOLDER			
A58	27190689	PC HOLDER			
A59	27190690	PC HOLDER			
A60	880019	Revet			
A63	8384440087	4TTB + 8SBC, TAP-TIGHT SCREW			
A64	838430088	3TTB + 8BBC, TAP-TIGHT SCREW			
A66	831140087	4TTW+8S, TAP-TIGHT SCREW			
A67	86414010	FWN4×10FN, FLANGE NUT			
VR101 ~ VR113	6170001	N60LGSC100KW15Z × 26, SLIDE VARIABLE RESISTOR			
VR201 ~ VR213					
△P901	253153	AS-EQ540UD, POWER SUPPLY CABLE [D][X]			
	253154	AS-EQ540UW, POWER SUPPLY CABLE [V][W]			
	253155	AS-EQ540UQA, POWER SUPPLY CABLE [A]			
	253156	AS-EQ540UQB, POWER SUPPLY CABLE [B]			
△T901	2300354	NPT-1007D, POWER TRANS- FORMER			
	2300356	NPT-1007DG, POWER TRANS- FORMER [V][G][W][X]			
	2300357	NPT-1007Q, POWER TRANS- FORMER [A][B]			
△S901	25035598	NPS-111-L560P, POWER SWITCH			
△S902	25065228	NSS-2299, SLIDE SWITCH			
△C951	3500065A	0.01μF, CAPACITOR			

NOTE

[X]: ONLY MILITARY MARKET MODEL
[V]: ONLY WEST GERMANY MODEL
[A]: ONLY AUSTRALIAN MODEL
[B]: ONLY BRITISH MODEL
[D]: ONLY 120V MODEL
[W]: ONLY 120V/220V MODEL

NOTE: THE COMPONENTS IDENTIFIED BY MARK
△ ARE CRITICAL FOR RISK OF FIRE AND
ELECTRIC SHOCK. REPLACE ONLY WITH
PARTS NUMBER SPECIFIED.